

IN THE CLAIMS

Please substitute claims 1-16 with the following:

1. (Original) An information processing device for sending data to a terminal device connected to a ~~second network~~ network domain made up of an aggregate of plural ~~first networks~~ subnetworks, said device comprising:

a terminal device that belongs to the network domain and has an IP address comprising a network prefix and an interface ID, said network prefix being assigned to said network domain and said interface ID being uniquely assigned within said network domain; and

a router connected to said network domain having a memory storage means for storing to store said interface ID paired with information of the next hop address for each terminal device in said network domain information for identifying said terminal device paired with position information specifying the current position of said terminal device;

said router being configured to determine, upon receiving data, decision means for determining whether or not an interface ID specified in the data is stored in the memory; and upon determining that said interface ID is stored in the memory, to transfer said data in accordance with the next hop address identification information specifying the terminal device of the transfer destination contained in said received data is stored in said memory storage means and,

transfer means for transferring said data to said specified first network holding said terminal device according to said stored position information paired with said identification information, when the result from said decision means is that said identification information is stored in said memory storage means.

2. (Cancelled)

3. (Cancelled)

4. (Currently Amended) An information processing device according to claim 1, wherein said router transfer means transfers said data to a second network domain fourth network made up of an aggregate of a plurality of subnetworks third networks when said router determines that said interface ID is not stored in said memory result from said decision means is that said identification information is not stored in said memory storage means.

5. (Cancelled)

6. (Currently Amended) An information processing method for an information processing device for sending data to terminal devices connected to a second network network domain constituted as an aggregate of a plurality of first networks subnetworks, said method comprising:

providing a terminal device that belongs to the network domain and has an IP address comprising a network prefix and an interface ID, said network prefix being assigned to said network domain and said interface ID being uniquely assigned within said network domain

a memory storage step for storing, in a router, information said interface ID specifying a said terminal device paired with a next hop address; position information specifying the current position of said terminal device;

receiving, at said router, a data packet specifying an interface ID;

a decision step for determining whether or not identification said interface ID specified by the data packet is information specifying the terminal device of the transfer destination contained in said received data is stored in said router memory storage step; and

~~a transfer step for if it is determined that said interface ID specified by the data packet is stored in said router, transferring said data packet to a specified first network holding said terminal device according to said next hop address stored position information paired with said interface ID identification information, when result from said decision step is that said identification information is stored in said memory storage step.~~

7. (Currently Amended) A recording medium having recorded thereon a computer-readable program for controlling an information processing device for sending data to terminal devices connected to a ~~second network~~ network domain constituted as an aggregate of a plurality of ~~first networks~~ subnetworks, said program comprising:

providing a terminal device that belongs to the network domain and has an IP address comprising a network prefix and an interface ID, said network prefix being assigned to said network domain and said interface ID being uniquely assigned within said network domain

~~a memory storage step for storing, in a router, information said interface ID specifying a said terminal device paired with a next hop address; position information specifying the current position of said terminal device;~~

receiving, at said router, a data packet specifying an interface ID;

~~a decision step for determining whether or not identification said interface ID specified by the data packet is information specifying the terminal device of the transfer destination contained in said received data is stored in said router memory storage step; and~~

~~a transfer step for if it is determined that said interface ID specified by the data packet is stored in said router, transferring said data packet to a specified first network holding said terminal device according to said next hop address stored position information paired with said~~

interface ID identification information, when result from said decision step is that said identification information is stored in said memory storage step.

8. (Currently Amended) A program in a computer for controlling an information processing device for sending data to terminal devices connected to a second network network domain made up of an aggregate of a plurality of first networks subnetworks, said method comprising:

providing a terminal device that belongs to the network domain and has an IP address comprising a network prefix and an interface ID, said network prefix being assigned to said network domain and said interface ID being uniquely assigned within said network domain

a memory storage step for storing, in a router, information said interface ID specifying a said terminal device paired with a next hop address; position information specifying the current position of said terminal device;

receiving, at said router, a data packet specifying an interface ID;
a decision step for determining whether or not identification said interface ID specified by the data packet is information specifying the terminal device of the transfer destination contained in said received data is stored in said router memory storage step; and

a transfer step for if it is determined that said interface ID specified by the data packet is stored in said router, transferring said data packet to a specified first network holding said terminal device according to said next hop address stored position information paired with said interface ID identification information, when result from said decision step is that said identification information is stored in said memory storage step.

9. (New) A network system using Internet Protocol Version 6 comprising:

a backbone network;

a plurality of subnetworks;

a first router connected to said backbone network to manage said plurality of subnetworks as a network domain;

a second router to manage a subnetwork in said network domain; and

at least one terminal device connected to a subnetwork in said network domain;

wherein each terminal device has an IP address comprising a network prefix and an interface ID, said network prefix being assigned to said network domain and said interface ID being uniquely assigned within said network domain.

10. (New) The network system of claim 9 wherein said first router has a first routing table to store said interface ID paired with a next hop address for each terminal device in said network domain.

11. (New) The network system of claim 10 wherein said second router has a second routing table to store said interface ID paired with a next hop address for each terminal device in said subnetwork managed by said second router.

12. (New) The network system of claim 11 wherein, upon a data packet being received by said first or second router, said first or second router determines whether or not an interface ID specified in said data packet is stored in the respective first or second routing table.

13. (New) The network system of claim 12 wherein, if said first or second router determines that the interface ID specified in said data packet is stored in the respective routing

table, said first or second router transfers said data packet in accordance with said next hop address corresponding to said interface ID stored in the routing table.

14. (New) The network system of claim 12 wherein, if said first or second router determines that the interface ID specified in said data packet is not stored in the respective routing table, the first or second router transfers said data packet in accordance with information stored in a default entry in the respective first or second routing table.

15. (New) The network system of claim 12 wherein said first and second routing tables are updated when a terminal device moves to another subnetwork in said network domain.

16. (New) The network system of claim 9 wherein said interface ID is contained within the lower 64 bits of the IPv6 address.